

Project ADVANCE

Advocacy and Assessment of Naloxone in Central Asia
Summary Report

February 2012

Abbreviations and Definitions

ADVANCE	Advocacy and Assessment of Naloxone in Central Asia
AIDS	Acquired Immune Deficiency Syndrome
CAB	Community Advisory Board
CARHAP	Central Asia Regional HIV/AIDS Programme
CDC	Centers for Disease Control and Prevention
CITI	Collaborative Institutional Training Initiative
CU	Columbia University
DatStat	A data collection software application
DFID	The United Kingdom Department for International Development
GBAO	Gorno-Badakhshan Autonomous Oblast
GHRCCA	Global Health Research Center of Central Asia
HIV	Human Immunodeficiency Virus
IDU	Injecting drug user
IHRD	International Harm Reduction Department
IRB	Institutional Review Board
MIS	Management Information System
MoH	Ministry of Health
NGO	Non-government organization
NIDA	National Institute on Drug Abuse
OSI	Open Society Institute
PEPFAR	The US President's Emergency Plan for AIDS Relief
PSI	Population Services International
QDS	Questionnaire Development System (data collection software)
RT	Republic of Tajikistan
SAB	Scientific Advisory Board
SFT	Soros Foundation Tajikistan
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNODC	United Nations Office of Drugs and Crime
USAID	United States Agency for International Development
WHO	World Health Organization

Basic Information

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Project Summary

ADVANCE is an ADVocacy and Assessment of Naloxone in CEntral Asia one-year project funded by OSI-New York to support regional advocacy initiatives to scale up the peer distribution of naloxone to opiate users and their support network members in Kazakhstan, Kyrgyzstan and Tajikistan. During the year, the ADVANCE team worked with NGOs, governments, and donors in the region to further develop country-specific advocacy strategies through collecting and analyzing data on overdose incidence, risk factors and strategies, including use of naloxone by peers, and access to emergency care, medical services, and trust points. These data help to identify micro- and macro-level barriers for wide-spread distribution and peer administration of naloxone, build an evidence base on the effectiveness and safety of naloxone, and better formulate specific strategies for further advocacy. In addition, the ADVANCE team collaborated with governments and donors, advising on the purchase and distribution of Naloxone in different health care facilities, NGOs, and trust point services. The project focused on using and improving existing data management and research tools to better formulate a stronger argument for wider availability and peer administration of naloxone. The ADVANCE team partnered with government and non-governmental agencies in the interpretation, verification, and triangulation of data collected as well as in formulating and implementing future recommendations for advocacy efforts.

This project was active from January 1, 2011 – December 31, 2011. From January through April, 2011, we reviewed existing country-specific documents and statistics ,including; the use and availability of naloxone, overdose incidence; naloxone administration; stakeholder involvement in the supply and distribution and policy making.

From April to June 2011, efforts started to build country and regional partnerships. These networks worked with the ADVANCE team to conduct a needs assessment to identify gaps in naloxone-related regulations (in each country and regionally) and suggestions to improve the situation.

In June and July 2011, partners traveled to Almaty for a regional workshop on data management and data collection. This included a component on bio-ethics/human subjects training on conducting research with injecting drug users (IDUs). During this training, the ADVANCE team presented different electronic data management systems like EpiSurveyor, QDS and a locally developed MIS that is used by CARHAP in Kyrgyzstan and Tajikistan, and after analysis the partners decided to use DatStat for the data collection. The training was attended by 18 representatives from six partner NGOs from Kazakhstan, Kyrgyzstan and Tajikistan. The trained partners – with GHRCCA technical assistance – took the lead in establishing a regional-wide system for data collection, monitoring and evaluation.

From August – November 2011, partners initiated data collection. Data collection included survey information from IDUs on their use of naloxone and experience with overdose. A total of 212 surveys were collected. In December 2011, the ADVANCE team held a final conference with partners from the

three countries in Almaty to review the data and discuss challenges and lessons learned from the project as well as to generate country specific recommendations and advocacy plans to widen peer distribution of naloxone in health facilities, policy makers, and harm reduction NGOs. Recommendations were also developed for project planning and suggestions for improved communication and collaboration to support naloxone distribution.

ADVANCE partners established Community Advisory Boards and Scientific Advisory Boards – which included members from government, NGO, and the medical community -- in Kazakhstan, Kyrgyzstan, and Tajikistan. These boards have helped form regional advocacy plans for each country with major goals to increase naloxone availability and to advocate for drug users and will continue to play a critical role in implementing country specific and regional advocacy plans

The report below provides in more detail the activities, reports, and data.

Project Goal

The goal of the one-year project was to support country-specific and regional advocacy initiatives to scale up the peer distribution of Naloxone to opiate users and their support network members in Kazakhstan, Kyrgyzstan and Tajikistan.

Project Objectives

- 1) To conduct a needs assessment on naloxone availability and use by mapping the current situation (legal status, access, availability, cost and peer distribution of naloxone) in each country and the region in general;
- 2) To establish local and regional partnerships to support efforts to enhance registration and availability of naloxone and to scale up peer distribution of naloxone in harm reduction agencies, including government agencies and local and international NGOs;
- 3) To train NGOs who provide services to IDUs to collect data on overdose incidence and the distribution and use of naloxone among their clients (as well as to conduct quality assurance, monitoring and evaluation of data collection.
- 4) To generate recommendations for policy and programs for each country based on project data and engage policy makers, medical providers, and community members at meetings, conferences, and roundtables in advocacy efforts for registration, accessibility, availability, and increased peer distribution of naloxone in the three countries.

Historical Background

The overdose situation and naloxone availability in Kazakhstan, Kyrgyzstan, and Tajikistan

Kazakhstan

In Kazakhstan, naloxone is a registered drug included in the list of essential (life saving) medications as a specific antidote used in cases of poisoning (as a 0.04% solution of naloxone hydrochloride in 1 ml ampules) approved by the Ministry of Health of Kazakhstan on December 22nd, 2004 (registered number: PK-ЛC-5N№010609). Naloxone has been available since 1996 but only in the city of Almaty (Berdenova, Gorbokononko, Volkova, & Volkova, 2011). It was introduced by the American International Health Alliance (AIHA), a humanitarian organization that established partnerships between health professionals in the US and developing countries. Through the USAID-funded partnership, the US medical partners from Boston, Massachusetts trained emergency staff from the Almaty Emergency Station in naloxone administration protocols. After a successful pilot of naloxone by the Almaty emergency station teams in 1996, naloxone was included in pre-hospital¹ emergency care treatment protocols for ambulances and recommended for routine use in cases of narcotic comas by emergency station teams. However, given that naloxone was not yet registered, it was not regularly procured by state authorities. Only in December, 2004, naloxone was finally registered and in December 2007, included into the Ministry of Health approved National Diagnostic and Treatment Protocols. Since then, naloxone has been procured for health facilities (mostly emergency stations although any government health facility could order it if needed) and its initially high price started to drop. The current supplier of naloxone is Ukrainian Pharmaceutical Enterprise “Health to People” at \$1.50 for 1 ml ampules of 0.4 mg /ml naloxone (Atayanz, Latypov, Ocheret, 2011).

Kyrgyzstan

In Kyrgyzstan, individual hospitals and treatment centers purchase medications for themselves, including naloxone. As of 2010, naloxone remained unregistered in Kyrgyzstan but was on the list of life-saving medicines. However, medical agencies could apply for government permission to purchase and distribute the drug. Naloxone has been sporadically available since 2007 at the narcological centers in Osh, Bishkek emergency services, and private pharmacies located close to hospital toxicology centers. Availability has depended on funding, donations, and utilization.

According to the Country Summary shared by OSI, there have been several free peer distribution programs carried out in Kyrgyzstan. In 2008, Ranar, an NGO that works with IDUs, purchased and distributed several hundred naloxone ampules among their clients in Bishkek. However, they did not apply for distribution rights and the program was discontinued when lawyers advised them of potential legal consequences. In 2009, the Republican Narcology Center in Bishkek received a grant from the

¹ Pre-hospital refers to treatment and care administered by emergency care ambulances outside of hospitals. Usually, it is followed by the patient being hospitalized and then treatment continues at the hospital.

United Kingdom Department for International Development (DFID) for the peer distribution of 5,170 naloxone ampules. Based on unstructured interviews with Narcology Center clients and staff, little objective data were collected, and this program was discontinued when the grant ended. UniHelp, the major pharmaceutical distribution company in Kyrgyzstan, has distributed 3,000 ampules per year since 2007 to the Republican Narcology Center, emergency centers, and hospital toxicology departments, mostly in the Bishkek and Chu regions. Naloxone is usually available at the Bishkek Emergency Station, however, it was unavailable for six months in 2009 (Kyrgyzstan Country Summary, OSI, 2010).

According to Attika's findings in 2010, naloxone is also part of the emergency kits carried by Bishkek paramedics, with 500 and 300 ampules purchased in 2008 and 2009, respectively. Naloxone has been available for purchase at the pharmacy of the toxicology department of City Hospital Number 4 in Bishkek for just under the equivalent of \$2 USD per ampoule and at the UniHelp pharmacy for just under the equivalent of \$0.50 USD.

In 2010, the United Nations Office of Drugs and Crime (UNODC) funded a grant to purchase 2,500 naloxone ampules, which were split between the Osh and Bishkek narcological centers in 2011. Population Services International (PSI) purchased 3,500 ampules in early 2011 for distribution as part of their new voucher-based naloxone distribution program. Other harm reduction NGOs routinely referred clients to the government drug treatment centers in Osh and Bishkek.

Tajikistan

According to the legislation of Tajikistan, naloxone is not included in the list of substances subject to special accounting (Sadykova, 2012). However, this medicine is included in the list of controlled drugs that should not be dispensed for administration by IDUs, which eliminates the possibility of providing them with emergency assistance from peers. In Tajikistan, naloxone is registered to the Warsaw Pharmaceutical manufacturer "Polfa" (1.0 ml ampule with 0.4 mg/ml of naloxone, costing 6 TJS or \$0.6 - \$1.4). Moreover, naloxone is included in the anti-shock standard kit which is designed as a first aid response for traumatic shock in medical settings, but its availability in these kits is significantly limited due to the fact that most naloxone is purchased by donors and distributed through NGOs. In fact, naloxone first appeared in the ambulance station thanks to the efforts of the NGO "Volontyor" as an objective of an overdose prevention project. This NGO is experienced in advocacy for naloxone and has supplied it to many medical settings to prevent overdose around the country. Since 2009, the Global Fund expanded access to naloxone through narcological dispensaries and reanimation departments. Little data is available on the number of overdoses and the use of naloxone in Tajikistan.

The following set of documents regulates the use of naloxone in Tajikistan:

1. Order of the Ministry of Health of the Republic of Tajikistan (MoH RT) on August 7, 2006, № 485 "On improvement of drug treatment in the Republic of Tajikistan";
2. Order of the MoH RT "On approval of Regulations on access to medicine Naloxone in facilities providing services to drug users"
3. "Guidelines for the implementation of harm reduction programs of the MoH RT", approved by the

MoH RT in 2010;

4. Guidelines "Management of overdose prevention activities and reducing deaths from overdoses of opiates", approved by the MoH RT November 3, 2011;
5. Naloxone's registration code in Tajikistan is ATX V03AB15;
6. Order of the MoH RT № 705, December 31, 20110020 on the inclusion of naloxone in the list of essential medicines as life-saving drugs for emergency in the medical settings and clinical protocols as a first aid in primary health care.

The International Harm Reduction Development Program (IHRD) and the Open Society Institute Assistance Foundation - Tajikistan have been funding pilot overdose prevention programs in the country since 2006. With IHRD's support, association **Volontyor** – an organization operating in the Gorno-Badakhshan Autonomous Oblast (GBAO) – since October 2006 has prevented death with the use of naloxone in 569 cases of overdose. The group also started an overdose prevention resource center where they have trained emergency services workers in overdose prevention techniques and naloxone use. Because Volontyor has established relationships with the regional governor office and ministry of health, the organization managed not only to supply naloxone to the emergency department, but also to distribute the medication to IDUs at trust points without prescriptions, as well as to distribute life-saving ampules to concerned family members.

In 2009, another project, **Apeyron** – based in Khatlon Region – began using naloxone for overdose prevention with IHRD and Soros Foundation—Tajikistan (SFT) funding. The organization's pilot program is run through the emergency department; ambulance workers are trained to respond to overdose calls and outreach workers and IDUs can get naloxone by prescription at the local emergency department.

Capacity Building on a Regional Level

Building Local Partnerships

To achieve the project objectives, the ADVANCE team formed key partnerships with five local non-governmental agencies in Kazakhstan, Kyrgyzstan, and Tajikistan. These NGO partners collected data about naloxone availability, overdose incidence, and peer distribution. In addition to Attika NGO (Kyrgyzstan) and Apeyron and Volontyor NGOs (Tajikistan), which were recommended by the Open Society Institute (OSI), we involved the Social Bureau Doverie (Kazakhstan) and Socium and Parents Against Drugs NGOs (Kyrgyzstan).

When we started the project, the only naloxone peer distribution program in Kazakhstan was GHRCCA's Project Renaissance, a National Institute on Drug Abuse (NIDA) funded program designed to prevent HIV and STI transmission in heterosexual injecting drug user (IDU) couples that

was initiated in 2008. The Social Bureau Doverie, a harm reduction NGO subcontracted to distribute naloxone for Project Renaissance, agreed to participate in Project ADVANCE.



It was decided to involve Kyrgyzstan-based Socium and Parents Against Drugs NGOs due to their leadership roles among Kyrgyz harm reduction NGOs (Socium co-leads the National "Partnership Network" harm reduction association and serves as liaison between the separate NGOs), highly developed infrastructure (both agencies are run by narcologists and employ professional social workers and outreach staff which is an asset missing in other NGOs), and geographical location (Parents Against Drugs location in the sometimes-overlooked south of Kyrgyzstan, adding diversity and accuracy to the data).

Attika, Apeyron, Volontyor, Doverie, Parents Against Drugs, and Socium assisted with providing data on overdose incidence and naloxone use, implementing data collection systems into naloxone peer distribution programs, advocating for naloxone availability, and helping to develop key recommendations. They have agreed to further assist in presenting the recommendations to government agencies and to disseminate them among key stakeholders.

To increase awareness and advance policies to increase access to naloxone, the ADVANCE team engaged eight government agencies from the three countries in project activities. These agencies included Kazakhstan's Republican AIDS Center, the Almaty City AIDS Center, the Almaty City Health Department, the Republican Narcological Center in Bishkek, Regional Narcological Center in Osh, and the Public Health Department, Ministry of Health, and Agency on Drug Control in Tajikistan.

In addition to the above described country-specific efforts, GHRCCA trained partners in bioethics/human subjects issues and data collection and management procedures and worked with partners to establish a region-wide system for data collection, monitoring and evaluation. GHRCCA recently held a regional conference with key stakeholders and partners to present data and generate recommendations for future naloxone advocacy and research initiatives. Attendees included representatives of Doverie NGO and Project Renaissance from Kazakhstan, Attika, Socium and Parents Against Drugs from Kyrgyzstan, Apeyron and Volontyor from Tajikistan, and leadership of Public Health programs from Soros offices in Kyrgyzstan and Tajikistan.

Bioethics Regional Training

The goal of the training was to enhance the knowledge and skills of the selected group of 12 representatives about contemporary bioethics and human research subjects' protection, which are especially important when working with vulnerable populations. The trainees included the leadership and staff of partner substance abuse, HIV- and IDU-servicing NGOs including Doverie Plus from Kazakhstan, Attika, Parents Against Drugs, and Alternativa v Narkologii from Kyrgyzstan, and Apeyron and Volontyor from Tajikistan. The training was conducted in May so that it preceded the data management training and field recruitment, consenting, and data collection activities scheduled for August. Collaborative Institutional Training Initiative (CITI) was chosen as the basic resource for the training. The Initiative was founded in March 2000 in collaboration between the University of Miami and the Fred Hutchinson Cancer Research Center to develop a web based training program in human research subjects' protection. Significant upgrades in hardware and software applied in 2007 and 2009 allowed the program to broaden its scope and to expand the courses offered to the participating institutions around the world. A multi-language course site, with materials in Spanish, Portuguese, French, Chinese, Thai, Japanese and Russian languages is now available for international participants. Preparation for the training included registration of the participants as Columbia University affiliates, and translation of the course materials for non-English speakers. The translated materials were circulated among the trainees two weeks prior to the expected completion time. Materials were submitted to Columbia University's IRB and country-specific Committees on Bioethics and their approval was obtained before any field activity began. The trainees completed suggested quizzes, with a one hundred percent course completion rate.

The CITI materials, offered to the ADVANCE partners, included the following modules:

Belmont Report and CITI Course Introduction, with links to the Belmont Report and additional contents regarding the CITI web site and the availability of the non-English versions of the Belmont Report;

History and Ethical Principles, containing discussions on why ethics are necessary when conducting research involving human subjects, providing an overview of the historical events that influenced the development of the current regulatory requirements, and employing discussions of the contemporary ethical standards that guide research currently;

Basic Institutional Review Board (IRB) Regulations and Review Process, containing basic information about the human subject protection regulations and IRBs, including the role, authority, and composition of the IRB;

Informed Consent, providing the learner with the framework for informed consent found within the Common Rule, discussing some of the special challenges associated with informed consent, for instance among vulnerable populations, and introducing the circumstances under which an IRB may waive the requirements for informed consent with examples of how this commonly is applied in social and behavioral sciences research;

Privacy and Confidentiality, defining the concepts and their applicability to social and behavioral science research, including a discussion on protecting privacy in research and guidelines for designing confidentiality procedures, along with topics including private versus public behavior, controlling access to private information, privacy and exempt research, privacy and research methods, confidentiality, privacy and reporting laws, and certificates of confidentiality;

International Research, including a discussion on global research, applicable regulations and guidelines and the importance of the local context, and providing information related to “engagement” in research;

Conflicts of Interest in Research Involving Human Subjects, describing conflicts of interest, which are frequently debated and defined by varying regulatory requirements, and including a general discussion of conflicts of interest with an emphasis on financial conflicts of interest, and the ethical concerns that arise in human subject research. The final part of the module is devoted to the role of IRBs and the primary strategies for eliminating, reducing, and managing conflicts of interest.

Training In Data Management Techniques

The Bioethics Training was followed by training in data collection techniques that was conducted for representatives from six partner NGOs in Almaty at the Kazakhstan School of Public Health from June 30 until July 2nd, 2011. Eighteen participants -- representatives from the six HIV/AIDS- and IDU-focused NGOs from Kazakhstan, Kyrgyzstan, and Tajikistan – were trained in data collection, interviewing skills and data collection quality control. Interviewing skills were taught through demonstrations, case studies, interactive discussions, practice exercises, and human subjects training. Difficulties with client

communication, professional responsibilities, and data collection were discussed in group sessions and potential solutions were identified. The ADVANCE team trained participants in data collection techniques and procedures using a paper-based system, computers, hand-held devices, and mobile phones. Skills in the use of modern data collection software (including DatStat, QDS, EpiSurveyor, and MIS) were taught through lectures, practice sessions, and a mock survey design exercise. Lastly, we reviewed the study protocol of the ADVANCE project and participants practiced ADVANCE-specific data entry trials in all four software programs.



*Participants at the training on data collection techniques –
Almaty, School of Public Health*

Participants completed the Database Evaluation Questionnaire, with 100% reporting DatStat to be the most convenient and user-friendly application. Each representative chose a database platform to use for the ADVANCE project at their organization based on internet-availability, cost, and ease of use. Each participant also evaluated the content and facilitation of the training session, with 100% positive feedback. However, specific responses will be taken into account and used to improve future training sessions.

The NGO representatives held smaller seminars and distributed training materials to other staff at their home organizations to spread the knowledge and skills learned during this training session. GHRCCA staff supported them in this effort through on-line communication and site visits arranged for technical assistance and troubleshooting.

Establishing a System for Data Collection, Monitoring and Evaluation

In this section we describe outreach efforts, inclusion criteria, data collection, and quality assurance (monitoring and evaluation) procedures applied to the ADVANCE project. Although designed as a capacity building and advocacy project and not a research study, it was, however, through ADVANCE that the partner NGOs were equipped with the systems of data collection and trained in collecting data to inform an evidence-based approach to advocacy efforts. The NGOs also started collecting the data. The ADVANCE team, analyzed the data; the main findings are presented later in the report. As models of naloxone distribution and client outreach and eligibility varied across the region as well as within the country (i.e, Tajikistan), we are not able to describe an overall methodology of client outreach and data collection that can be applied to the region as a whole. Rather, we provide details that can help to understand how data were collected in each particular country and by each NGO. The participating NGOs find the collected data extremely helpful for informing their agencies' planning efforts and improving existing services for IDUs. Our goal is to increase capacity of these organizations to be able to continue data collection systems independently after the end of the study period. Thorough data collection and

analysis will ensure that programs are beneficial for IDUs, guide program improvements, and increase the chance for further funding.

The data were collected from 212 clients of partner organizations participating in the ADVANCE project: Attika, Kyrgyzstan (18), Parents Against Drugs, Kyrgyzstan (20), Apeyron, Tajikistan (57), Volontyor, Tajikistan (51), Doverie, Kazakhstan (1), and 65 participants of Project Renaissance/GHRCCA in Kazakhstan. Data were collected from the clients of NGOs who met the following inclusion criteria: (1) older than 18 years old; (2) able to communicate in Russian or Tajik languages; (3) returning for the next portion of naloxone or voucher for naloxone; OR (4) having experienced overdose or naloxone administration in their lifetime (Tajikistan).

Naloxone Distribution Models and Client Outreach

The initial program was advertised among potential clients by the NGOs' outreach workers. Those clients who returned to the NGO for the next portion of naloxone or naloxone voucher, or had experience using naloxone in the past, were asked to participate in the survey. If participants expressed interest, NGO staff administered informed consent to potential participants. After completing consent form, NGO staff administered a structured survey to participants in a face-to-face interview. No compensation was provided for participating in the survey. Certain aspects of the overdose program outreach differed from country to country and from region to region.

Kazakhstan

In Almaty, with only three cases completed under the ADVANCE umbrella by NGO "Doverie", the major data were collected as a part of the Renaissance study. Project Renaissance is a randomized clinical trial for heterosexual couples in which at least one member of a couple is an IDU. Research assistants recruited potential participants and their partners from trust points, HIV-serving NGOs, narcology and rehabilitation centers. Potential participants came to the Renaissance office, where trained research assistants explained the study goals, procedures, benefits, and risks, and screened them for eligibility. Couples were included in the study only if both members of a couple met the following criteria: both were aged 18 or older; both partners identify each other as their main partner of the opposite sex and consider them their boy/girlfriend, spouse, lover and/or parent of their child; the relationship has existed at least 6 months; each partner intended to remain together for at least 12 months; at least one partner reported having had unprotected vaginal or anal intercourse with the other partner at least once in the previous 30 days; at least one partner reports injecting drugs in the past 30 days and his or her self-reported injection drug use is verified through observation of recent venipuncture by a trained RA; and neither partner had plans to relocate beyond a reasonable distance from the study site. If eligible, they went through a comprehensive assessment questionnaire and were randomized into two study arms: (1) a 5-session couples-based HIV/STI risk reduction intervention; or (2) a 5-session couples-based wellness promotion intervention, which served as the comparison condition. As both intervention arms included a 30-minute

session activity on overdose prevention, all project participants were trained in overdose prevention and response by experienced facilitators and provided vouchers for exchange to naloxone at the City AIDS Center. Participants completed a pre-intervention assessment and repeated assessments at 3, 6, and 12 months post-intervention. During the one-year follow up period, participants were eligible to receive additional vouchers for naloxone. Participants requesting additional vouchers for naloxone were asked to complete the survey about any overdose episodes they or their partners or others experienced, how they responded to the overdose episode and their experiences in using naloxone.

Kyrgyzstan

In Bishkek, Kyrgyzstan, the outreach was conducted by the NGOs' staff. The clients would visit the medical doctor at the Republican Narcological Center who issued them two ampules of naloxone along with a copy of a prescription that was supposed to be presented to a policeman in case they interrogated the client about their reason for carrying the medicine, and to justify its legal background. The clients who received naloxone more than once were approached by the Attika's outreach workers and asked to participate in the survey.

In Osh, however, naloxone was available only in the Regional Narcological Center and staff issued naloxone along with two copies of the prescription only after screening the clients. Thus, the NGO social worker could interview only the clients who agreed to come to the NGO office upon receiving naloxone from either the doctor at narcological center, or outreach workers who served as liaisons between the narcological center and the IDUs in the field. The clients who received naloxone from narcological doctors or outreach workers more than once were invited to participate in the survey, then were consented and interviewed.

Tajikistan

In Dushanbe, Tajikistan, the harm reduction NGO Apeyron and narcological agencies distributed naloxone using a "take-home" approach, similar to that described above. In Khorog, Tajikistan, Volontyor NGO, administered naloxone in their field offices instead of distributing naloxone to the clients and collected data on the overdose episode from clients. According to the staff, most Ismailis consider drug use as a sin so drug users inject on the street and in public places, which is seen as more appropriate. Due to the NGO's past activities, the local drug users are well trained to come to the field offices to get help in case of overdose, and thus, outreach workers did not have to actively recruit participants.

The questionnaire was slightly modified for Volontyor's participants. In the Khorog-specific form, there is no question about the number of ampules received by their clients since it was administered in the NGO by the agency's trained medical staff. The questionnaire was also translated to Tajik, and the clients were given the choice between Russian and Tajik languages.

Data Collection

The Naloxone Distribution questionnaire (Attachment 1) included questions on client's demographic background, whether he/she had witnessed or experienced overdose, his/her interventions in cases of overdose, and the specifics of the last overdose event in which they were involved. Upon completion of the face-to-face interview, NGO staff trained in the electronic data management software would enter this information into the database.

The paper forms did not list any participant identification numbers., The database automatically generated the case numbers, compiling them from the elements existing on the paper forms including country of the participant's residence, their age and gender, the day, month and year of interview, and the hours and minutes when it started. Since no clients' names were registered anywhere during the data collection and data entry, no master list linking the clients' names and ID numbers was created..

Quality Assurance

During the data collection period, we conducted quality assurance through regular phone and Skype calls and email correspondence with all Kazakh, Kyrgyz and Tajik partners, Additionally, other GHRCCA staff was available for urgent troubleshooting when problems arose and corresponded several times about issues with data collection software and hardware. The ADVANCE team conducted site visits in Kazakhstan and Kyrgyzstan as well to monitor data collection and troubleshoot problems.

Needs Assessment and Actions Taken

Through the needs assessments in this project, we have mapped the current situation of naloxone registration status, availability, incidence of overdose, and peer distribution. This effort informed the actions that GHRCCA undertook in the course of the project in Kazakhstan, Kyrgyzstan, and Tajikistan.

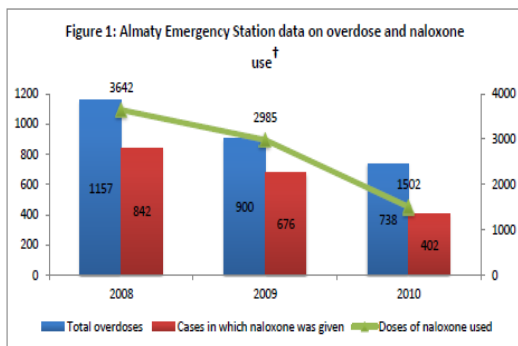
Kazakhstan

Needs Assessment

In 2010-2011, with funding from OSI and in close collaboration with Almaty Emergency Station, GHRCCA staff conducted a needs assessment to understand the scope of the overdose problem, the availability of naloxone in health facilities, barriers for its administration, and needs for future interventions. A retrospective analysis of all cases in which naloxone was administered by the Almaty Emergency Station staff from 2002 until 2009 was conducted in 2010 with initial funding from the OSI Alumni program. Under Project ADVANCE, that assessment was updated in January-February of 2011 with data on all the cases involving naloxone administration in 2010. Data on all the incident cases and deaths in which naloxone was utilized were analyzed by narcological condition, year, gender, and average number of doses of naloxone per person. The results of this analysis revealed that the number of overdose cases in Almaty has been decreasing from 1,157 in 2008 to 738 in 2010 (Berdenova et al, 2011). The number of overdose cases in which naloxone was administered, decreased from 842 (73% of overdose cases) in 2008 to 402 (54% of overdose cases) in 2010.

The number of ampules of naloxone administered decreased as well from 3,642 in 2008 to 1,502 in 2010, representing a decrease from an average of 4.3 to 3.7 ampules of naloxone per overdose case. The decrease in naloxone use in 2008-2010 most likely resulted from reduced procurement and availability of naloxone due to the recent legislation changes.

For this data, however, “overdose” was defined broadly as “a patient presenting in a state of poisoning or coma from opiates, psychomimetics, alcohol, or hallucinogens, used either through injection or another method.”² Naloxone was also given in cases of coma with uncertain etiology to help in diagnosis and possibly treatment. In other words, this medication was used safely and without side effects by the Almaty Emergency Station in many nosological conditions until 2008.



² Berdenova, Gorbokononko, Volkova, & Volkova, 2011. Unpublished report. **Drug and alcohol overdose situation assessment and administering of Naloxone in overdose events in Almaty, 2010**

Sources of naloxone in Almaty in 2010-2011 and earlier included the emergency stations and ambulance services. Naloxone has not been available through pharmacies. During 2011, naloxone has been unavailable at the Almaty Emergency Station. As an alternative, Cardiamine (Nikethamide), a drug in the amphetamine class, has been used in overdose cases. Emergency Station staff report naloxone will be available in Almaty again in 2012. Availability of naloxone in emergency stations and ambulances in other regions of Kazakhstan is unknown. The GHRCCA's voucher-based distribution program was closed in September 2011 due to a stock-out of this medication at a local pharmaceutical distributor in Kazakhstan. While other distributors had naloxone, they were neither willing to sell it to organizations without a medical license to provide medical services, nor interested in selling it in small quantities..

Actions Taken

Informed by the needs assessment, the following actions were implemented by GHRCCA in collaboration with local partners:

- The overdose prevention voucher-based distribution program through Project Renaissance was continued to be supported by GHRCCA in Almaty;
- Naloxone was continued to be supplied to Kazakhstan partners including the City AIDS Center and the NGO "Doverie" until September 2011;
- Instruments for data collection on overdose and naloxone use cases were developed, piloted and standardized for use in other countries of Central Asia;
- Staff of NGOs (Attika in Kyrgyzstan, Apeyron and Volontyor in Tajikistan, and Doverie in Kazakhstan) were trained to perform data collection;
- Field data collection to monitor the efficacy of the distribution efforts of the City AIDS Center and the NGO Doverie was further supported;
- The Community Advisory Board was formed and a round table to introduce Project ADVANCE and to advocate for wider access to naloxone among IDUs and their peers was conducted in May 2011 in Almaty;
- A regional conference with key stakeholders was conducted in December, 2011 in Almaty to present the country strategy to advocate for wider naloxone availability.

Additionally, with assistance from GHRCCA, the Kazakhstan Republican AIDS Center has included a pilot peer distribution program for naloxone and training to build capacity for overdose prevention and support into its Round 10 application to the Global Fund to Fight AIDS, TB and Malaria. According to the proposal, five pilot regions of Kazakhstan will be supplied with naloxone for peer distribution and NGOs will be trained to provide proper counseling on overdose risks, prevention strategies, naloxone administration, and data collection. However, availability of funding for that round remains unknown.

Project Renaissance: Background Information and Interception with ADVANCE

Since 2004, GHRCCA has witnessed the devastating problem of fatal opiate overdose among the IDU participants of its HIV prevention research. Early in these projects, availability of naloxone was uncertain and IDUs were unaware of naloxone as a safe and effective means to reverse overdose cases. Even

when naloxone was available through ambulances and emergency stations, it was largely inaccessible to IDUs because they were reluctant to call the ambulance due to fears of police and being registered as an IDU. To address this issue, GHRCCA developed and integrated a naloxone voucher-based distribution model to facilitate pre-hospital overdose response into the HIV prevention program for IDU couples in Almaty.

From June 2009 till October 2011, 273 couples, in which at least one person in the couple was an IDU, participated in GHRCCA's overdose prevention program as part of a NIDA-funded randomized controlled clinical trial (R01 DA 022914-01A2) on HIV/STI prevention among 300 heterosexual couples in Almaty, Kazakhstan. As this was a research study, participants were only eligible when they met certain eligibility criteria (described in detail in Data Collection, Monitoring and Evaluation section of the report). Both intervention arms in the study included a 30-minute session activity on overdose prevention and response where couples were introduced to naloxone, trained in overdose prevention and response and referred to obtain naloxone from the Almaty City AIDS Center. GHRCCA's NIDA-funded Project Renaissance was the only non-government source of naloxone administered through a peer distribution program in Kazakhstan. IDUs enrolled in this research study were provided vouchers for exchange to naloxone at the Almaty City AIDS Center. All participants were asked about their experiences with naloxone when they came for a second voucher. During the project, we distribute a total of 546 vouchers were distributed to participants, of which 61 were second vouchers. Among participants who received one or more vouchers, 225 participants (41.2%) exchanged the voucher for 2 ampoules of naloxone --185 participants received naloxone one time and 40 participants received them twice. In addition to quantitative data, Project Renaissance staff collected qualitative information about the context of drug use and overdose, as well as participant experiences with naloxone and seeking professional medical aid, was collected and still need to be analyzed. A unique feature of this program is training both partners of a couple to provide assistance to each other in case of overdose or to other network members. The results of Project Renaissance showed that that the majority of overdose cases happen in apartments and were witnessed by a spouse, relatives, family members and close friends (see the table 1 Kazakhstan data on locations where overdose took place and table 2. Regional data showing who was there around the person experiencing an overdose).

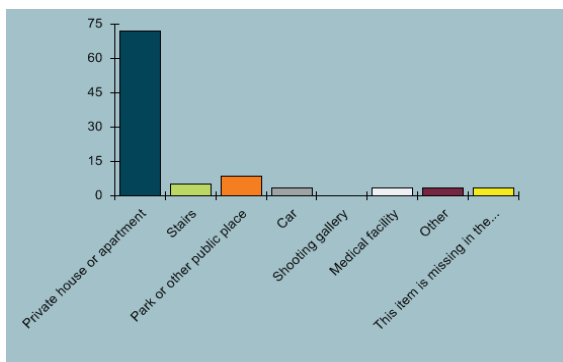


Figure 1. Kazakhstan data on locations where overdose took place

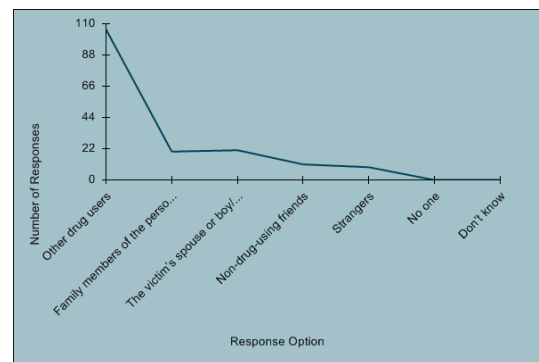


Figure 2. Regional data showing who was present with the person experiencing an overdose

In September 2011, GHRCCA has established another site for overdose programming at NGO “Doverie”, where, as opposed to Project Renaissance, any client who expresses an interest in receiving naloxone is provided with a voucher for naloxone exchange at the City AIDS Center. “Doverie” staff is trained to briefly train clients on how to recognize and manage overdose, including IDUs and their peers and relatives, prior to providing them with the voucher. Given that the program began so recently, information about naloxone distribution and use is limited to only three cases and therefore data analysis is not yet available.

It is illegal for GHRCCA to distribute naloxone itself because it is not a professional medical organization licensed to distribute medications, thus the development of the voucher-based distribution model. However, the results of the study clearly demonstrated that less than half of the participants (41%) actually visited the state medical facility (City AIDS Center) for this much-needed medication.

Kyrgyzstan

Needs Assessment

As of early 2011, naloxone remained unregistered with the Kyrgyz Ministry of Health. Our needs assessment conducted collaboratively with Attika and Parents Against Drugs showed that current registration status negatively impacted the commitment of local pharmacies to distribute naloxone due to their uncertainty of eventual legal consequences. Lack of naloxone in pharmaceutical networks limited IDUs' access to naloxone and made it unavailable to those who were reluctant about applying to the state narcological centers for naloxone. Data on overdose incidence and naloxone availability and use from Osh and other regions of Kyrgyzstan was either scarce or unavailable.

Another obstacle for the broader availability of naloxone was the internal decision of the narcological service leadership to introduce prescription-based distribution of naloxone available through the UNODC's grant, which required IDUs or their relatives to present an ID to obtain naloxone. The narcologist wrote two copies of a prescription, one of which stayed with the narcologist who provided the client with two ampules of naloxone free of charge, and the other copy was given to the client as a protective measure in case the client was detained by police and interrogated about the origin of the medicine. Since naloxone is associated with drug use, IDUs are concerned that carrying naloxone might be viewed as evidence that they are using or dealing opiates by the police. Thus, the IDU's copy of the prescription issued by narcologists could be presented to the police as evidence of their legal possession of naloxone and justify the IDU's status as a client registered with the narcological center.

The narcological service's internal protocol on naloxone distribution was not available publicly. This lack of transparency caused confusion about the specifics of their procedures, such as whether the visitors who apply for naloxone get registered with the narcological service as clients / IDUs, how relationship status (i.e. for a relative or significant other) could be proved by a client applying for naloxone on behalf of an IDU, what types of identification could be presented for obtaining naloxone, and whether the same ID could be presented more than once. Potential clients appeared uncertain about under which circumstances could the narcological personnel's actions be considered a violation of the protocol, and if so, how complaints should be filed. The non-transparent status of the protocol causes situations in which IDUs who are uncomfortable identifying themselves to narcological centers or government entities are likely to avoid following this prescription-dependent protocol and either try to manage overdose without using naloxone, or ask their non-IDU friends or relatives to obtain naloxone for them.

Also, the needs assessment clearly unveiled clients' dissatisfaction with the quality and content of educational materials that narcological services distributed along with naloxone, as well as the doctors' inability to monitor efficiency of their distribution effort. There were no data available neither on the clients' return rate nor on the use or outcome of the naloxone ampules.

Actions Taken

Informed by the needs assessment, GHRCCA implemented the following actions in Kyrgyzstan in collaboration with local partners: (1) initiation of and support for naloxone registration, (2) establishment of agency-based data collection to monitor the efficacy of the distribution by narcological centers, (3) development of naloxone- and overdose-specific educational materials and handouts in three local languages, and (4) establishment of peer distribution of naloxone in South Kyrgyzstan.

Per recommendations by GHRCCA expressed at the round table meeting that was arranged by Soros Foundation-Kyrgyzstan in March 2011 and attended by representatives of the key local and international IDU- and HIV-servicing agencies, PSI managed registration of naloxone in Kyrgyzstan with financial support from OSI.



The round table meeting provided a great opportunity for discussions on the form of registration that would be most applicable for naloxone in the current context (e.g. allowable for distribution with or without prescription). Mr. Timur Isakov of the Drug Control Agency mentioned that if a medicine is distributed with a prescription and is on the list of essential drugs, then the National Fund of Obligatory Medical Insurance will reimburse the clients for 85 percent of the pharmacy price of the drug. At the same time, the NGOs felt like it was reasonable to have naloxone registered as a prescription-free medicine because many drug users refuse to go to narcology centers for a prescription due to the fear of prosecution, stigma, and legal consequences such as suspension of their driver's license, and thus the prescription requirement limits their access to this safe and life-saving medication. If distribution of naloxone remains prescription-based, it makes issuing naloxone to and administration of naloxone by the peers or partners of IDUs technically illegal and causes potential legal consequences for the narcologists, who can be accused of breaching treatment protocols which identify screening a patient and diagnosing them of injection drug use or overdose a key requirement for issuing a prescription. This could result in excluding peers, relatives, or outreach workers from the peer-distribution pyramid, thus challenging its sustainability.

Due to PSI's efforts and OSI financial support, naloxone was registered in Kyrgyzstan in November 2011 and can be distributed with a prescription. GHRCCA conducted a series of meetings with the officers of UniHelp, who co-managed the registration procedure, along with PSI and advised them on the most efficient registration options.

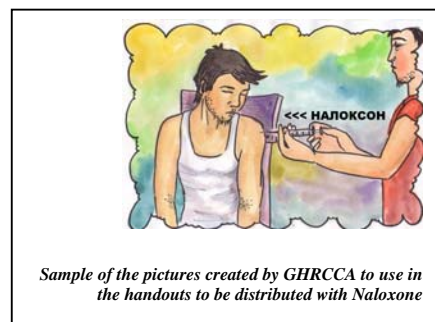
Data collected through the network established by GHRCCA in Kazakhstan, Kyrgyzstan and Tajikistan as a part of our technical and methodological assistance to partner NGOs, clearly showed that 82% (n=14) of people who received naloxone from the narcological centers but never used it for preventing overdose either lost the medicine, broke the ampoules, or gave them away.



To help with the issue, GHRCCA brainstormed possible solutions with partner NGOs and recommended the use of self-made containers prepared from the broadly available and quite affordable plastic cable carriers used for attaching phone cables to the wall. At their own expense, staff of Attika and Parents Against Drugs produced and donated to narcological centers in Osh and Bishkek several hundreds of smaller containers that fit two ampules of naloxone and can be safely carried in pockets, thus minimizing the risk of their breakage.

GHRCCA took the lead in revising the existing educational materials available in narcological services that were considered by NGOs' clients and international experts as incorrect and out-of-date, and produced revised versions of leaflets adapted in Kyrgyz and Uzbek languages. The electronic versions of the leaflets were disseminated to the agencies involved in naloxone distribution in Kyrgyzstan so that their clients could be educated about the naloxone's pharmacology and other properties.

The data collected by GHRCCA in 2011 show that people with secondary or high school education are more likely to witness or experience overdose than the ones with a more advanced educational level. This is similar to conclusions made by Attika from their data collected at a focus group in 2010, and prompted us to make the decision to include pictures in our handouts that would make the materials more comprehensive and convenient for people with limited reading skills. Collaboratively with partner NGOs, we created a series of hand-made pictures that will be used in the materials distributed by our partners.



For building local and regional partnerships to scale up the peer administration of naloxone, a trip to the South of Kyrgyzstan was arranged for Danil Nikitin of GHRCCA and Sergei Bessonov of Attika NGO. The goal of the trip was to assist with improving distribution of naloxone by the regional narcological center b using outreach workers who manage routine syringe-exchange activities. It was proposed that the narcologist assigned to screen the clients would write the naloxone prescriptions, and issue the medicine. In addition, the narcologist would make weekly visits to the office of Parents Against Drugs, the harm reduction NGO with the largest network of IDU clientele, to process their clients as well as process clients that come to the narcological center. This would be a complementary effort aimed at broadening naloxone distribution mechanisms and increasing the number of clients benefiting from access to this medicine, especially IDUs who avoid visiting narcology centers due to fear of prosecution, stigma, and legal consequences. When such visits are impossible due to the narcologist's busy schedule or other circumstances, the NGO's social worker would go to the narcological center with photocopies of IDs collected by outreach workers from their clients in the field, receive naloxone, and distribute it to the outreach workers who would bring it to their clients. This procedure was initiated and as of December 01, 2011, 224 ampules of naloxone out of the 1,000 available at narcological center since February 2011 had been distributed through this method.

Tajikistan

Needs Assessment

No data are currently available regarding recent opiate overdoses in Tajikistan. Thus, in the period from 2001 to 2005, 169 cases of death related to overdose of opiates were officially registered by the State Narcological Dispensary. Given that autopsy in Tajikistan is very rare and that the relatives of deceased people try to hide the underlying cause of death if overdose-related, overdose is significantly underreported in official data. Data collection of overdose cases by organizations implementing harm reduction programs is not collected systematically. Thus, NGO Volontyor conducted a survey among drug users in two districts of Gorno-Badakhshan Autonomous Oblast with the results showing a high incidence of overdose from opiates. Almost half of the 43 respondents reported having experienced an overdose during the last month; respondents had witnessed an average of 1.4 cases of overdose. Only in 12 out of 61 cases (20%) did IDUs call for an ambulance and in 4 cases, peers delivered the overdosing person to the medical facility. In most cases, peers tried to do their best to resuscitate the victims through cold water, calling their name, and other methods. Naloxone was used in only 10 cases, 9 of which was administered by paramedics. Only in one case was naloxone administered by peers. It should be noted that calling an ambulance in the above cases was not always possible. In five cases, respondents said that they had no opportunity to call, and in another five cases, that they refused to call for medical services. Therefore, it is crucial to empower drug users and those in their immediate environment to be able to prevent and manage overdoses, as well to ensure availability of naloxone for those in need.

Actions Taken

Informed by the needs assessment, the following actions were implemented by GHRCCA in collaboration with local partners: (1) field data collection was established to monitor the efficacy of distribution by partner NGOs Apeyron and Volontyor; (2) local partners were trained in data collection and management of collected data on overdose cases and the use of naloxone; (3) a round table was conducted on advocacy to promote naloxone; and (4) naloxone was included in the list of essential medicines in Tajikistan to be used in medical and primary health care settings.

Conducting a Regional Stakeholders' Conference

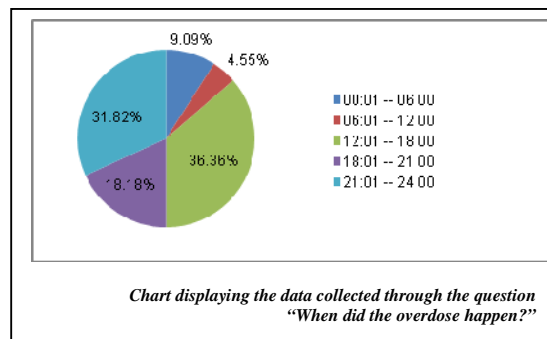
The regional conference for the key stakeholders involved in naloxone advocacy was conducted at Kazzhol Hotel in Almaty on November 30 through December 01, 2011. Partners from Kazakhstan, Kyrgyzstan, and Tajikistan attended.

The main goal of the event was to wrap up the ADVANCE project, present the partners with the project results, and identify challenges, lessons learned and strategies for further improving availability of naloxone in the Central Asian republics. The conference was co-sponsored by Soros Foundation Kyrgyzstan and Soros Foundation Tajikistan. The agenda of the conference included describing of the data management methodology at the sites involved in data collection in Kazakhstan, Kyrgyzstan and Tajikistan, reviewing the efforts applied to observe the contemporary requirements about human subjects' protection, summarizing the approaches of naloxone distribution, collecting the debriefing incident data, and reviewing data analysis techniques.



The conference was split into two parts to improve efficiency and relevance for all participants. On Day 1, representatives of partner NGOs and local Soros Foundations gathered at the GHRCCA office to share their experience about data collection and collaboration with clients and partner agencies. Presentations were given by staff of Apeyron, Volontyor, Attika, and Parents Against Drugs. The leadership of the NGOs confirmed their adherence to human subjects protection measures while collecting data for the ADVANCE survey. The obstacles they faced while working on the project, were discussed, along with brainstorming applicable solutions. Country-specific information was gathered and generalized to inform the materials that were presented on the second day, at the plenary meeting attended by all invitees.

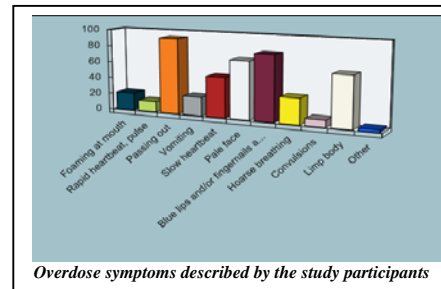
Additionally at the Day 1 meeting, the meeting participants were shown how the collected data could be accessed and analyzed on-line, split by country and by agency, saved, updated, and interpreted.



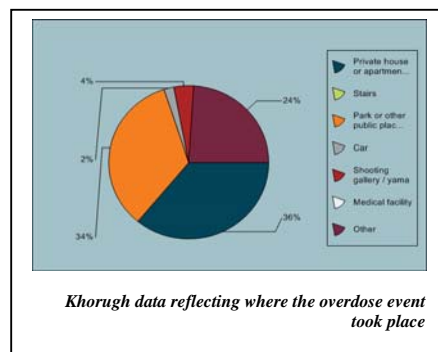
The participants proposed ways to interpret the collected data and use it for further advocacy efforts. For example, the collected data show that overdose incidents happen mostly in period from 12 pm through 6 pm, and then from 9 pm through midnight (see the graph on the left). These findings will be actively used by Osh partners to demonstrate the importance of distribution of naloxone by outreach workers and

peers to make it available when it is urgently needed, rather than limit its availability by exclusive distribution through the regional narcological office that is only open until 2 pm.

After data about witnessed symptoms of overdose were presented (see the graph with overdose symptoms data), there was a discussion about how overdose witnesses can diagnose overdose. It was suggested that the indicated symptoms, like passing out, pale face, blue lips, foaming at mouth, and other signs, will be described in overdose-specific handouts and educational materials in Kyrgyz, Kazakh, Russian, Uzbek, Farsi and Shugni languages as a priority by GHRCCA for future projects.



The data on where overdose events took place was presented and showed a greater rate “in the car” in the Kyrgyz data set. The participants suggested including naloxone as a compulsory part of the automobile emergency kits carried by taxis. It was very helpful for the Volontyor team from Gorno-Badakhshan Oblast of Tajikistan to monitor the collected data for the places where overdose events took place. Due to Ismaili religious beliefs which consider homes sacred places in which injecting drugs is sinful, the proportion of overdose events that occurred out of the house was greater than in other countries. With outreach activities focused on finding and serving IDUs on the street, the Volontyor team requested that GHRCCA the questionnaire to include more practical and specific options for out-of-home drug use. In general, the meeting participants demonstrated extreme interest in continuation and further development of data collection with the goal of using the statistical findings to inform their future programs.



The representatives of the narcological services in Osh and Bishkek who attended the Day 1 meeting actively participated in the group discussions on strategies to increase naloxone availability and development of client-friendly services and overdose prevention mechanisms. They confirmed their total support for the advocacy efforts and expressed willingness to be involved in the training and seminars that GHRCCA is planning for 2012.

In general, the Day 1 meeting appeared to be very helpful to the participants, who appreciated the opportunity to learn and discuss the country-specific information used during the Day 2 plenary meeting attended by all conference invitees.

The primary goal of the Day 2 meeting was to present the generalized data on the country-specific advocacy efforts, and to identify ways to improve the initiatives started in 2011. The following agenda items were covered by the participants:

- Presentations on research methodology (participants, sampling, recruitment approaches, data collection techniques, questionnaires, and data analysis), bioethics training, consenting clients, recruitment approaches applied in different sites, data collection techniques, debriefing incident data, and data analysis approaches utilized for the project;
- Presentations on collected statistics, both country-specific and regional;
- Presentation and discussion on the applicability of contemporary data collection tools in developing and implementing client-centered interventions among vulnerable populations;
- Presentation and discussion on effective models of overdose prevention programming involving collaboration between NGOs and the government sector

Group work to identify country-specific steps for making naloxone further available among different groups of IDUs was followed by group presentations on follow-up advocacy efforts applicable for each country of the region.

Synopsis of these strategic plans is presented in the country-specific summary section of this report, and in the recommendations below.

The conference participants identified workgroups for further advocacy, involving country-based experts that will monitor the progress with implementing the overdose prevention and naloxone availability.



The conference participants are observing presentation of Apeyron NGO, Tajikistan

Main Findings from the Data Collected

As mentioned earlier, the data were collected from 212 clients of partner organizations participating in the ADVANCE project: Attika, Kyrgyzstan (18), Parents Against Drugs, Kyrgyzstan (20), Apeyron, Tajikistan (57), Volontyor, Tajikistan (51), Doverie, Kazakhstan (1), and 65 participants of Project Renaissance /GHRCCA in Kazakhstan.

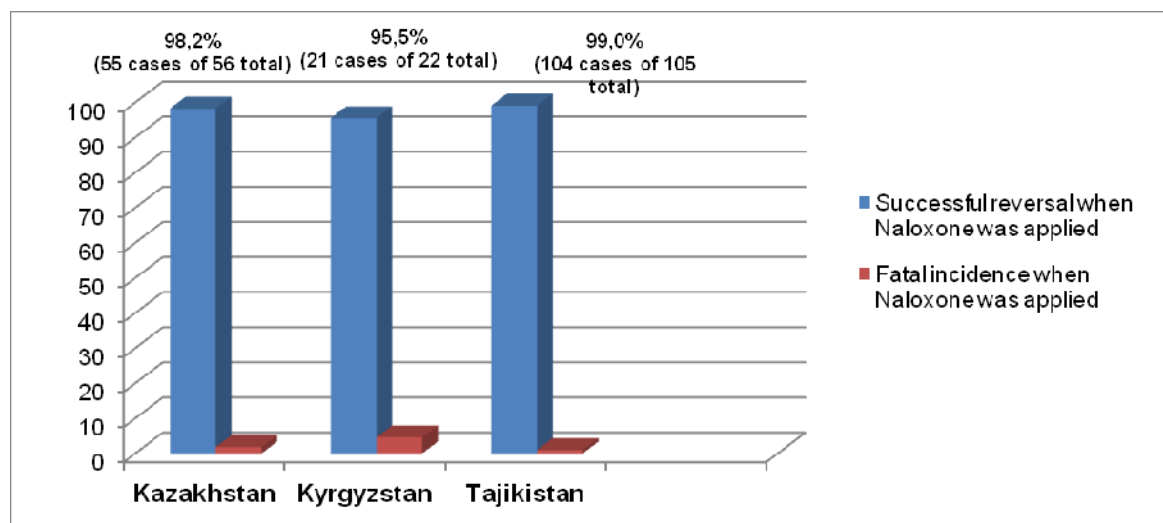
Of 212 clients surveyed, 24 reported that they did not use Naloxone that they received (1 case in Tajikistan, 7 cases in Kazakhstan, and 16 cases in Kyrgyzstan). The rest 188 cases of Naloxone administration in the case of overdose were analyzed and demonstrate that the medicine is very effective in reversing overdose experienced by IDUs: with 3 cases that cannot be linked to a country/agency due to data entry error, and 2 cases where overdose reversal could not be evaluated due to missing data, in 98 cases (52,1%) victims recovered without additional medical aid, in 80 cases (42,6%) people recovered after ambulance and their peers and relatives rendered them applicable medical aid, in 2 cases (1,1%)

people were taken to the hospital by ambulance and survived, and only in 3 cases (1,6%) Naloxone could not help and people died. Of these 3 fatal cases, 1 was registered in Bishkek – the death happened because Naloxone was injected too late. According to the witness of the incident, the victim was actually dead when his peers decided to inject Naloxone to make sure all measures be undertaken. The second death was registered in Kazakhstan – it occurred because the victim injected a larger dose of heroin after he successfully recovered of overdose being once provided Naloxone. The third fatal case happened in Tajikistan – the witness reported cooperative injection activity in the remote area of Khorog that resulted in overdose of one of the participants to whom Naloxone was injected but too late. Naloxone was injected by his peers who ran away soon after they saw their friend dead.

The table below provides the data split by country:

Outcome of Overdose Incident When Naloxone was Administered	Kazakhstan		Kyrgyzstan		Tajikistan	
	Count	Pct	Count	Pct	Count	Pct
Successful reversal:						
The person recovered without medical aid	49	87,5%	21	95,5%	28	26,7%
The person recovered after rendering him / her medical aid	6	10,7%	0	0%	74	70,5%
The person was taken to the hospital	0	0%	0	0%	2	1,9%
Fatal incidence:						
The person died immediately	1	1,8%	1	4,5%	1	0,9%
The person died in the hospital	0	0%	0	0%	0	0%

The chart demonstrates how effective Naloxone was in reversing overdose experienced by the ADVANCE clients:



The only major adverse events were seizures in one case and pulmonary edema in two cases, however it is unknown whether these were related to the naloxone injection, the original drug use, or a comorbid condition. Withdrawal symptoms were experienced in 30% of overdose victims, but it is known and expected that naloxone can elicit this effect. Naloxone was administered into a peer of the Project Renaissance study participant in the vast majority of cases, thus emphasizing how greatly a legal requirement for a prescription would limit the use of naloxone in overdose cases.

Country Specific Advocacy Plans

KAZAKHSTAN

In Kazakhstan, naloxone was not available in 2011 due to the failure to include naloxone on the governmental universal procurement list. Emergency care services and ambulances had to switch back to the use of Cardiamine in the event of an overdose. An intervention is needed to advocate for naloxone procurement at the city, regional, and national levels and to include naloxone in the governmental universal procurement list.

Also, Population Services International (PSI) with the PEPFAR-funded Dialogue project is planning to introduce pharmacy-based distribution of naloxone in exchange for a voucher. One problem with this program is the persistent lack of knowledge and popularity of naloxone among IDUs. Therefore, an informational campaign aimed at raising awareness of naloxone as a life-saving drug is needed to increase the demand.

Specific plans discussed by Kazakhstan participants at the December regional conference in Almaty include:

1. To improve awareness and understanding of policy-makers about the overdose-associated morbidity and mortality:

- Submit a letter to city and national health authorities with a detailed description of the epidemiological situation with opiate overdose, scope of the problem, and the necessary response;
- Hold higher-level meetings with government authorities to educate them about the problem of opiate overdose and gain their support for future programming;
- Conduct cost effectiveness analysis on use of naloxone as a life saving medicine and present the results to policy makers.

2. Advocate and provide technical assistance for improved practices in centralized procurement of naloxone:

- To include naloxone into the national formulary of the medicines for the Republic of Kazakhstan;
- Apply to the Formulary Commission at the Ministry of Health to include naloxone in the state purchasing from a single distributor so as to provide free access to naloxone in primary health care settings;
- If possible, to apply for amendment to the 2012 Formulary of Medicines of the Republic of Kazakhstan.

3. Increase knowledge and support of naloxone as an option among IDUs, their family members and friends for overdose response:

- Publish stories and articles about the successful reversal of overdose cases in local newspapers and media;
- Conduct meetings and seminars with local NGOs and harm reduction groups to distribute manuals on overdose prevention and response and use of naloxone;

- Publish manuals and materials on overdose prevention and response and the use of naloxone for further free distribution to IDU and NGOs.
- 4. Continue collecting and analyzing data on overdose incidence:**
- Adjust questionnaires and provide local partners with additional training on data collection and data analysis, with emphasis on further use of the collected data to advocate for up-to-date peer-based overdose prevention approaches.

KYRGYZSTAN

In Kyrgyzstan, availability of naloxone was limited due to the lack of registration. Now that it is registered, further intervention is needed to advocate for naloxone availability at emergency services in Bishkek, Osh, and Jalalabad, in prisons, and as a part of harm reduction packages distributed by agencies in IDU communities. The campaign aimed at increasing awareness of naloxone among IDUs and the mainstream population is also important as it will increase the demand for local pharmacies to provide this medication.

Specific plans discussed by Kyrgyz participants at the regional conference in November in Almaty were similar to those proposed by the Kazakhstan delegation and includes the following:

- 1. To improve awareness and understanding by policy-makers about the overdose-associated morbidity and mortality:**
 - Hold higher-level meetings with government authorities to introduce them to the statistical data on overdose and naloxone use collected in ADVANCE, and further educate them on the opiate overdose problem and gain their support for future programming.
- 2. Increase transparency of existing Naloxone-specific internal protocols at the Kyrgyz Narcological Services:**
 - Make the internal narcological service's naloxone-specific protocol publicly available;
 - Assist with having the protocols translated in local languages and properly adjusted for clients of different age groups and educational level.
- 3. Advocate and provide technical assistance for improved practices in centralized procurement of naloxone:**
 - To include naloxone on the list of medicines recommended by Ministry of Health for use by emergency services nation-wide.
- 4. Increase knowledge and support of naloxone as an option among IDUs, their family members and friends for overdose response**
 - Publish stories and articles about the successful reversal of overdose cases in local newspapers and media;
 - Adjust existing materials and create new ones adapted for various age groups and for people with different educational levels, in no less than three local languages.

5. Continue collecting and analyzing data on overdose incidence:

- Adjust questionnaires and provide local partners with additional training on data collection and data analysis, with emphasis on further use of the collected data to advocate for up-to-date peer-based overdose prevention approaches.

TAJIKISTAN

Specific plans discussed by Tajik participants at the regional stakeholders' conference in Almaty in December 2011 include:

1. To include the problem of mortality related to drug overdose into the priority goals of the state anti-drug policy, and to allocate government funds for this kind of activity:

- Work with policy makers on allocating state funds for procurement of naloxone in the quantities needed to equip all emergency, general, and specialized inpatient facilities; and allowing the government to support NGOs to implement overdose prevention programs.

2. To reform the legislative system and law enforcement practice that currently aggravates overdose problems:

- To work with the Drug Control Service and law enforcement bodies to cancel departmental instructions requiring emergency healthcare personnel to transmit to the police any information about the calls on overdose;
- To encourage the Drug Control Service to abolish the practice of having both doctors and law enforcement officers attend to the calls on overdose.

3. To improve the quality of surveillance monitoring and data collection on overdose and make these more available:

- To introduce the national and regional reporting on fatal overdose events;
- To introduce overdose monitoring systems in harm reduction programs;
- To make overdose statistics available through publications, websites of statistical agencies, health facilities, and drug control service.

4. To improve the quality and availability of medical aid in overdose events :

- To advocate for equipping all emergency and inpatient facilities with adequate quantities of naloxone;
- To include the topic of treatment of acute conditions related to drug use into the curriculum of medical universities and colleges, as well as post-graduate courses for staff of emergency stations, multi-departmental hospitals, toxicology departments and intoxication treatment centers, narcology dispensaries and inpatient facilities, AIDS centers, tuberculosis centers, and infectious disease hospitals;

- To conduct training for doctors and pharmacy staff on the reduction of stigma towards drug users.

5. To strengthen the role of medical facilities in overdose prevention:

- To include into the drug treatment standards provision of naloxone or prescriptions to patients and their relatives, as well as advising on relapse risks and overdose prevention;
- To include information about overdose risks and first aid techniques in counseling of patients at AIDS centers, tuberculosis and infectious-disease hospitals.

6. To expand the training programs on pre-hospital aid and naloxone distribution among drug users and their relatives:

- To document and disseminate lessons learned from pilot preventive programs in the region;
- To mobilize funding and provide technical support for implementation of overdose prevention programs and a standard set of services under the harm reduction programs in the region;
- To involve people from the drug users' immediate environment (their parents, spouses, partners, friends) in overdose prevention training;
- To promote strategies of overdose risk reduction, including providing information about the risks of mixing drugs, the benefits of switching from injecting to non-injecting drug use, and the risks associated with new homemade drugs;
- To carry out mandatory counseling on overdose prevention for prisoners before their release;
- To provide training, consultation and distribution of naloxone to rehabilitation center staff and clients, as well as among patients undergoing detoxification and their families.

7. To work with the Donors and National Coordination Committee (NCC) to improve access to naloxone:

- To integrate overdose prevention programs into regional programs on HIV and drug abuse;
- To address overdose prevention in regional discussions;
- To coordinate the implementation of harm reduction programs through the technical working groups at the NCC;
- To provide technical support to NGOs to increase capacity and improve the quality of services provided to beneficiaries.

Recommendations

1. For health facilities, NGOs, and policy makers – to improve quality of overdose statistics by introducing a unified system of country and regional reporting on fatal overdose events; a system of ongoing data collection, monitoring and evaluation for the overdose component of harm reduction programs including regular quality assurance and analysis of data; a system for verification and generalization of overdose data provided by different sources.
2. For harm reduction programs –to expand training programs on pre-medical aid and overdose response with naloxone among drug users and their significant others by documenting and disseminating lessons learned in pilot preventive programs; providing technical support for implementation of overdose prevention in the region; involving people in drug users' immediate environment (their parents, spouses, partners, friends); promoting strategies of overdose risk reduction.
3. For health facilities – to improve access to naloxone by allocating funding for naloxone procurement and its provision to medical facilities and drugstores; ensuring wider access to naloxone through a network of pharmacies; including naloxone into the “list of pre-medical aid medications” and ensuring access to different naloxone forms over-the-counter; removing the mandatory prescription of naloxone that is the primary barrier for the peer distribution of naloxone
4. For health facilities – to improve quality of medical aid in overdose events by equipping all emergency and in-patient facilities with adequate quantities of naloxone; including the treatment protocols for acute drug-related conditions into the curriculum of medical universities, colleges, and post-graduate courses; including counseling on overdose risks and provision of naloxone to patients and their relatives into the drug treatment protocols; including information about overdose risks and response techniques in counseling of patients at AIDS centers, tuberculosis, and infectious-disease hospitals.
5. For donors – to improve access to naloxone by integrating the overdose prevention programs into the regional programs on HIV and drug abuse; raising questions about how to prevent overdose on a regional level of discussion; coordinating the implementation of overdose prevention programs through the technical working groups at the National Coordination Committees; and providing technical support to NGOs to increase capacity and improve the quality of services provided to beneficiaries.

The ADVANCE project helped to advocate for IDUs in Kazakhstan, Kyrgyzstan, and Tajikistan through a multi-faceted approach. Peer distribution projects were strengthened by the incorporation of systematic data collection and systems to train staff in human interaction, ethics, and research methods. Key partnerships were formed among stakeholders in the harm reduction community, allowing these people and organizations to continue to collectively advocate for IDUs. Helping to get naloxone registered in Kyrgyzstan was a huge accomplishment that will allow greater access to naloxone from pharmacies and

healthcare centers across the country. Organizations now need not fear that naloxone will be removed from the List of Essential Medications and their permissions revoked. However, there are still several major objectives to be undertaken in the future.

Several factors still limit the open accessibility of this life-saving medication. Naloxone is still unregistered in Tajikistan, limiting the free procurement and supply of naloxone. In all three countries, the requirement for drug users to have a prescription in order to purchase naloxone requires that they register with the drug treatment center, which many IDUs refuse given the stigma and fear of legal consequences. Naloxone has no abuse potential and relieving the prescription requirement would also allow IDUs to easily purchase this medication for use at the time and location of overdose on any victim of overdose. Healthcare centers need to consistently carry naloxone and a greater number of peer distribution programs should be created to train drug users in the use of naloxone and to educate them about overdose. Paramedics in Bishkek report, “it is difficult to help IDUs without naloxone” (Attika, 2010). With greater attention to increasing universal access for naloxone, overdose fatalities can be decreased and drug users maybe more likely to receive the help they need to reduce their drug use and drug-related health risks as well as to improve their overall quality of life.

Conclusion

We are interested in exploring ways to provide continued help to local partners who would like to advance their knowledge of effective and sustainable advocacy approaches, data management, and use of data for capacity building. The aim of all follow-up activities will be to further fine-tune collaborations in advocacy and research that involve representatives for vulnerable populations. We are very eager to discuss the possibility of a future project that would involve local non-government agencies, local Ministries of Health, and academia. We look forward to communicating with OSI, and note how honored and pleased we were to collaborate on the ADVANCE project with so many of Central Asia’s talented professionals.

If there are any questions or suggestions, it would be our pleasure to provide OSI with further information on the completed program.

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Attachment One: Naloxone Distribution questionnaire

Project “ADVANCE”

Advocacy and Assessment of Naloxone in Central Asia An Overdose Incident and Naloxone Administration Report

This questionnaire must be filled in every time of Naloxone administering in overdose event, or when participants ask for additional Naloxone vouchers.

AND01. Date of interview: ____/____/____ (dd/mm/yyyy)

AND02. Time of interview: ____ (hh): ____ (mm)

AND03CNTR. Country where data are being collected:

__01 Kazakhstan __02 Kyrgyzstan __03 Tajikistan __04 Tajikistan / Khorugh

AND03ORGN. Agency (NGO, medical agency) where data are being collected:

AND04. Interviewer's name or initials (max. 10 characters): _____

AND05. How old are you today? _____ years old

(if younger than 18, end interview, thank them, provide them with a short refresher training, and give them new Naloxone)

AND06. What is your gender? __01 Male __02 Female __03 Transgender/transsexual

AND07. What is the highest level of education or schooling you have completed? Check one:

__01. No formal schooling

__02. Primary school (grade 1 through grade 4)

__03. Secondary school (grade 5 through grade 9)

__04. High school (grade 10 through grade 11)

__05. Technical or vocational school

__06. University or post-graduate education

__07. I am a student, still studying

AND08A. How many ampoules of Naloxone did you receive during your last visit?

_____ (number of ampoules)

AND08B. How many of the ampoules of Naloxone that you had received during your last visit, did you spend for overdose prevention?

_____ (number of ampoules)

(if AND08B value is zero, skip to the AND40, then end interview, thank the person, provide them with a short refresher training, and give them new Naloxone)

AND09. Please remember the recent overdose event that happened to you or which you have witnessed, when you or somebody else used Naloxone in a case of overdose. When did this happen?

___ ___ / ___ ___ / ___ ___ ___ ___ (dd/mm/yyyy)

AND10. At what time did it happen?

___ ___ (hh): ___ ___ (mm)

AND11. How many people jointly injected drugs when an overdose happened?

___ ___ people

AND12. Where did the overdose event take place? (*check one*):

- a. ___ Private house or apartment
- b. ___ Stairs
- c. ___ Park or other public place
- d. ___ Car
- e. ___ Shooting gallery (yama)
- f. ___ Medical facility (specify): _____
- g. ___ Other (specify): _____

AND13. What is the closest intersection or address to the spot where the overdose took place?

Intersection of street _____ and street _____
or indicate a landmark that will help with locating the area _____

AND14. What was your relationship to the person who overdosed? (*check one*):

- 01. ___ Self (skip to AND17)
- 02. ___ Partner
- 03. ___ Friend
- 04. ___ Boy/girlfriend or spouse
- 05. ___ Family member
- 06. ___ Other (please specify): _____

AND15. What was the gender of the person who overdosed?

___01 Male ___02 Female ___03 Transgender/transsexual

AND16. What was the age of the person who overdosed?

- 01. ___ Under 18
- 02. ___ 18-30
- 03. ___ 31-40

04. __41-50

05. __51 or above

06. __Don't know

AND17. Who else was around the person experiencing an overdose? (check all that apply):

01. Other drug users	<input type="checkbox"/> Yes	<input type="checkbox"/> No
02. Family members of the person overdosing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
03. The victim's spouse or boy/girlfriend	<input type="checkbox"/> Yes	<input type="checkbox"/> No
04. Non-drug-using friends	<input type="checkbox"/> Yes	<input type="checkbox"/> No
05. Strangers	<input type="checkbox"/> Yes	<input type="checkbox"/> No
06. No one	<input type="checkbox"/> Yes	<input type="checkbox"/> No
07. Don't know	<input type="checkbox"/> Yes	<input type="checkbox"/> No

AND18. Had the person been released from prison or jail in the 6 months prior to the overdose?

Yes No I don't know

AND19. **Research Manager**, please describe the details of overdose event, what kind of assistance was received, how was Naloxone administered and what the outcome was:

AND20. What kinds of drugs were used in this case of overdose? Check all that apply:

No	Drug type (name)	yes	no
I.	DEPRESSANTS		
1.1.	OPIATE DRUGS		
	a. Heroin	01	00
	b. Methadone	01	00
	c. Artisanal injectable opiates («khanka», «shirka», «semena», «chernye») – specify	01	00
	d. Morphine	01	00
	e. Codeine (in therpinekode, tetralgine etc.)	01	00
	f. Thramadole (Thramal)	01	00
	g. Phentaniile («belyi kitaets»)	01	00
	h. Opium		
1.2.	BENZODIAZIPINES		
	i. Phenazepam	01	00
	j. Nitrazepam	01	00
	k. Diazepam (Relanium, Seducsen)	01	00
	l. Clonazepam	01	00
	m. Lorazepam (Merlit)	01	00

1.3.	SEDATIVE/TRANQUILIZERS		
	n. Alcohol	01	00
	o. Antidepressants (Amitriptilline, Aurorics, Prozak, Remeron) – specify	01	00
	p. Barbiturates (Phenobarbital – luminal)	01	00
II.	STIMULANTS		
	q. Methamphetamine	01	00
	r. Pervitine (Vint)	01	00
	s. Cocaine	01	00
	t. MDMA («extasy»)	01	00
	u. Amphetamine («skorost», «spidy»)	01	00
III.	Other – please specify: _____		

AND21. Please describe the overdose symptoms in this event; check all that apply:

01. Foaming at mouth	<input type="checkbox"/> Yes	<input type="checkbox"/> No
02. Rapid heartbeat	<input type="checkbox"/> Yes	<input type="checkbox"/> No
03. Passing out	<input type="checkbox"/> Yes	<input type="checkbox"/> No
04. Vomiting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
05. Slow heartbeat	<input type="checkbox"/> Yes	<input type="checkbox"/> No
06. Pale face	<input type="checkbox"/> Yes	<input type="checkbox"/> No
07. Blue lips and/or fingernails and skin	<input type="checkbox"/> Yes	<input type="checkbox"/> No
08. Hoarse breathing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
09. Convulsions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Limp body	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11. Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No

AND21SP. Please specify if “other” is checked: _____

AND22. What was done for overdose reversal or overdose death prevention during this last case? Check all that apply:

01. Did nothing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
02. Called their name to try to wake them	<input type="checkbox"/> Yes	<input type="checkbox"/> No
03. Placed in the rescue position (on the side)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
04. Physical stimulation (specify whether patting, beating...):	<input type="checkbox"/> Yes	<input type="checkbox"/> No
05. Ice application	<input type="checkbox"/> Yes	<input type="checkbox"/> No
06. Water shower	<input type="checkbox"/> Yes	<input type="checkbox"/> No
07. Rescue breathing	<input type="checkbox"/> Yes	<input type="checkbox"/> No

08. Heart massage	<input type="checkbox"/> Yes	<input type="checkbox"/> No
09. Cordiamine injection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Salt solution injection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11. Water injection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12. Call for emergency aid	<input type="checkbox"/> Yes	<input type="checkbox"/> No
13. Took to hospital	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14. Naloxone injection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15. Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No

AND22SP. Please specify if "other" is checked: _____

AND23. To whom was Naloxone administered?

01. Myself

02. Other person (specify and describe situation when you administered Naloxone to other persons, who these were etc):

AND24. How was the Naloxone injected into the person experiencing an overdose? Check one:

- a. Into a muscle
- b. Into a vein
- c. Subcutaneously (under the skin)
- d. Don't know

AND26. Did you or the person suffering the overdose, recover after the first injection of Naloxone?

01. Yes (skip to AND29)

02. Yes, but soon lost his/her consciousness again, so the second ampoule was administered (skip to AND28)

03. No

AND27. If no, did you or another person administer the second ampoule?

01. Yes, and he/she recovered consciousness

02. Yes, but he/she did not recover consciousness

03. No (skip to AND29)

AND28. How long after the first Naloxone dose was the 2nd one given?

- 01. Less than 5 minutes
- 02. More than 5 minutes
- 03. I don't know

AND29. How effective do you think Naloxone was in stopping this overdose? Check one:

- a. Highly effective
- b. Effective
- c. Effective to some extent
- d. Ineffective

AND30. How long after revival did someone stay with the overdose victim to make sure they were okay?

- 01. Left right away
- 02. Stayed for less than 2 hours
- 03. Stayed for 2 hours or more

AND31. What happened to the person who was overdosing? Check one:

- 01. The person recovered without medical aid (go to AND32)
- 02. The person recovered after rendering him / her medical aid (go to AND32)
- 03. The person died immediately (skip to AND33)
- 04. The person was taken to the hospital (go to AND32)
- 05. The person died in the hospital (skip to AND33)
- 06. I don't know (skip to AND33)

AND32. Did the person overdosing have any physical, emotional or social problems after the overdose?
Check all that apply:

01. Withdrawal syndrome (nausea, achiness, vomiting)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
02. Seizures	<input type="checkbox"/> Yes	<input type="checkbox"/> No
03. Pulmonary edema	<input type="checkbox"/> Yes	<input type="checkbox"/> No
04. Depression	<input type="checkbox"/> Yes	<input type="checkbox"/> No
05. Legal problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No
06. Financial problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No
07. Guilt	<input type="checkbox"/> Yes	<input type="checkbox"/> No
08. Other emotional problems	<input type="checkbox"/> Yes	<input type="checkbox"/> No
09. Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No

AND32SP. Please specify if "other" was checked: _____

AND33. What do you think might be the reason for the overdose that happened to you or the person you assisted last time?

01. Change of supplier	<input type="checkbox"/> Yes	<input type="checkbox"/> No
02. Increase of drug dose	<input type="checkbox"/> Yes	<input type="checkbox"/> No
03. Mixing drugs (for example with alcohol, sedatives, etc.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
04. Injecting drugs in a hurry	<input type="checkbox"/> Yes	<input type="checkbox"/> No
05. A break in using drugs	<input type="checkbox"/> Yes	<input type="checkbox"/> No
06. Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No

AND33SP1. Please specify if "03 (mixing)" was checked: _____

AND33SP2. Please specify if "06 (other)" was checked: _____

AND34. Was the professional help sought? 01. Yes (go to AND35) 02. No (go to AND36)

AND35. Was the professional help received?

a. No

b. Yes (please specify what

help): _____(AND35SP)

AND36. Please specify why the professional help was not sought: _____

AND37. Today, how confident are you that you can correctly use Naloxone to reverse future overdoses?

01. Not at all confident

02. Hardly confident

03. Moderately confident

04. Completely confident

AND38. Today, how confident are you that you can do things to improve your own health?

01. Not at all confident

02. Hardly confident

03. Moderately confident

04. Completely confident

AND39. Today, how confident are you that you can improve the health of others?

01. Not at all confident

02. Hardly confident

03. Moderately confident

04. Completely confident

(If you have answered the AND39, do not answer the AND40 – just end interview, thank the person, provide them with a short refresher training, and give them new Naloxone)

AND40. What happened to the Naloxone ampoules that you got in the distributing agency but did not use? (*check one*):

- a. They are still with me
- b. I have thrown them away as their shelf-life expired
- c. I lost them
- d. It broke
- e. They were confiscated by authorities (please specify the circumstances, time, place etc)

(AND08gSP)

- f. I gave them away (please specify the circumstances, time, place etc)

(AND08hSP)

- g. I don't know

- h. Other (please specify): _____

END OF QUESTIONNAIRE